WHAT IS CLAIMED IS:

1.   A method of determining a potential of a diabetic patient to benefit from anti oxidant therapy for treatment of a vascular complication, the method comprising determining a haptoglobin phenotype of the diabetic patient and thereby determining the potential of the diabetic patient to benefit from said anti oxidant therapy, wherein said benefit from said anti oxidant therapy to a patient having a haptoglobin 2-2 phenotype is greater compared to patients having haptoglobin 1-2 phenotype or haptoglobin 1-1 phenotypes.

2.   The method of claim 1, wherein said vascular complication is selected from the group consisting of a microvascular complication and a macrovascular complication.

3.   The method of claim 2, wherein said vascular complication is a macrovascular complication selected from the group consisting of chronic heart failure, cardiovascular death, stroke, myocardial infarction and coronary angioplasty associated restenosis.

4.   The method of claim 2, wherein said microvascular complication is selected from the group consisting of diabetic retinopathy, diabetic nephropathy and diabetic neuropathy.

5.   The method of claim 2, wherein said macrovascular complication is selected from the group consisting of fewer coronary artery collateral blood vessels and myocardial ischemia.

6.   The method of claim 1, wherein said determining said haptoglobin phenotype is effected by determining a haptoglobin genotype of the diabetic patient.

7.   The method of claim 6, wherein said step of determining said haptoglobin genotype of the diabetic patient is effected by a method selected from the group consisting of a signal amplification method, a direct detection method and detection of at least one sequence change.

8.   The method of claim 7, wherein said signal amplification method amplifies a molecule selected from the group consisting of a DNA molecule and an RNA molecule.

9.   The method of claim 7, wherein said signal amplification method is selected from the group consisting of PCR, LCR (LAR), Self-Sustained Synthetic Reaction (3SR/NASBA) and Q-Beta (Qβ) Replicase reaction.

10.   The method of claim 7, wherein said direct detection method is selected from the group consisting of a cycling probe reaction (CPR) and a branched DNA analysis.

11.   The method of claim 7, wherein said detection of at least one sequence change employs a method selected from the group consisting of restriction fragment length polymorphism (RFLP analysis), allele specific oligonucleotide (ASO) analysis, Denaturing/Temperature Gradient Gel Electrophoresis (DGGE/TGGE), Single-Strand Conformation Polymorphism (SSCP) analysis and Dideoxy fingerprinting (ddF).

12.   The method of claim 1, wherein said determining said haptoglobin phenotype is effected by directly determining the haptoglobin phenotype of the diabetic patient.

13.   The method of claim 12, wherein step of determining said haptoglobin phenotype is effected by an immunological detection method.

14.   The method of claim 13, wherein said immunological detection method is selected from the group consisting of a radio-immunoassay (RIA), an enzyme linked immunosorbent assay (ELISA), a western blot, an immunohistochemical analysis, and fluorescence activated cell sorting (FACS).

15.   A method of determining the importance of reducing oxidative stress in a diabetic patient so as to prevent a diabetes-associated vascular complication, the method comprising the step of determining a haptoglobin phenotype of the diabetic patient, thereby determining the importance of reducing the oxidative stress in the specific diabetic patient, wherein said importance of reducing oxidative stress is greater in a patient having a haptoglobin 2-2 phenotype compared to patients having haptoglobin 1-2 phenotype or haptoglobin 1-1 phenotypes.

16.   The method of claim 15, wherein said vascular complication is selected from the group consisting of a microvascular complication and a macrovascular complication.

17.   The method of claim 16, wherein said vascular complication is a macrovascular complication selected from the group consisting of chronic heart failure, cardiovascular death, stroke, myocardial infarction and coronary angioplasty associated restenosis.

18.   The method of claim 16, wherein said microvascular complication is selected from the group consisting of diabetic retinopathy, diabetic nephropathy and diabetic neuropathy..

19.   The method of claim 16, wherein said macrovascular complication is selected from the group consisting of fewer coronary artery collateral blood vessels and myocardial ischemia.

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20.   The method of claim 15, wherein said step of determining said haptoglobin phenotype is effected by determining a haptoglobin genotype of the diabetic patient.

21.   The method of claim 15, wherein said step of determining said haptoglobin genotype of the diabetic patient is effected by a method selected from the group consisting of a signal amplification method, a direct detection method and detection of at least one sequence change.

22.   The method of claim 21, wherein said signal amplification method amplifies a molecule selected from the group consisting of a DNA molecule and an RNA molecule.

23.   The method of claim 21, wherein said signal amplification method is selected from the group consisting of PCR, LCR (LAR), Self-Sustained Synthetic Reaction (3SR/NASBA) and Q-Beta (Qβ) Replicase reaction.

24.   The method of claim 21, wherein said direct detection method is selected from the group consisting of a cycling probe reaction (CPR) and a branched DNA analysis.

25.   The method of claim 21, wherein said detection of at least one sequence change employs a method selected from the group consisting of restriction fragment length polymorphism (RFLP analysis), allele specific oligonucleotide (ASO) analysis, Denaturing/Temperature Gradient Gel Electrophoresis (DGGE/TGGE), Single-Strand Conformation Polymorphism (SSCP) analysis and Dideoxy fingerprinting (ddF).

26.   The method of claim 15, wherein said step of determining said haptoglobin phenotype is effected by directly determining the haptoglobin phenotype of the diabetic patient.

27.   The method of claim 26, wherein said step of determining said haptoglobin phenotype is effected by an immunological detection method.

28.   The method of claim 27, wherein said an immunological detection method is selected from the group consisting of a radio-immunoassay (RIA), an enzyme linked immunosorbent assay (ELISA), a western blot, an immunohistochemical analysis, and fluorescence activated cell sorting (FACS).

29.   A kit for evaluating a potential of a diabetic patient to benefit from anti oxidant therapy for treatment of a vascular complication, the kit comprising packaged reagents for determining a haptoglobin phenotype of the diabetic patient and a label or package insert indicating that kit is for use in evaluating a potential of a diabetic patient to benefit from antioxidant therapy for treatment of a vascular complication.